

Preface

This is the first issue of a new series of bimonthly progress reports describing work performed for the JPL/NASA Deep Space Network (DSN). Current work for the DSN was previously reported in Volume II of the now retired Space Programs Summary series of Laboratory bimonthly publications. The new report series is an uninterrupted follow-on to the Space Programs Summary, Volume II.

This report series presents progress on DSN supporting research and technology, advanced development and engineering, and implementation, and DSN operations which pertain to mission-independent or multiple-mission development as well as to support of flight projects. Each issue presents material in some, but not all, of the following categories in the order indicated.

Description of the DSN

Mission Support

- Interplanetary Flight Projects
- Planetary Flight Projects
- Manned Space Flight Project
- Advanced Flight Projects

Advanced Engineering

- Tracking and Navigational Accuracy Analysis
- Communications Systems Research
- Communications Elements Research
- Supporting Research and Technology

Development and Implementation

- Space Flight Operations Facility Development
- Ground Communications Facility Development
- Deep Space Instrumentation Facility Development
- DSN Project and System Development

Operations and Facilities

- DSN Operations
- Space Flight Operations Facility Operations
- Ground Communications Facility Operations
- Deep Space Instrumentation Facility Operations
- Facility Engineering

In each issue, the part entitled "Description of the DSN" describes the functions and facilities of the DSN and may report the current configuration of one of the six DSN systems (tracking, telemetry, command, monitoring, simulation, and operations control).

The work described in this report series is either performed or managed by the Tracking and Data Acquisition organization of JPL for NASA.